

1 **ABSTRACT**

2 A multi-window vehicular monitoring system has a data collection
3 assembly, a console unit and multiple video cameras. The data collection
4 assembly uses RF signal transmission to send distance data, and the console unit
5 is further connected to a monitor and several video cameras. The system
6 employs an image overlay controller to correlate the distance data and images to
7 produce single-channel or multiple-channel video signals. With a continuous
8 display of video images from all angles and constantly updated distance data, the
9 vehicle driver becomes more aware of conditions around the vehicle at any given
10 time. Thus no blind spots exist for the driver around the vehicle. Using such a
11 monitoring system, a driver's visibility and safety can be considerably enhanced
12 under all driving conditions.